

**Statement of John Felmy, Chief Economist,  
American Petroleum Institute, before the  
House Transportation and Infrastructure Subcommittees on  
Water Resources and Environment and Economic Development,  
Public Buildings, and Emergency Management**

October 18, 2005

I am John Felmy, Chief Economist of the American Petroleum Institute -- the national trade association for the U.S. oil and natural gas industry, representing all sectors of the industry, including companies that make, transport, and market gasoline.

**I. INTRODUCTION**

The oil and natural gas industry recognizes the catastrophic impact of Hurricanes Katrina and Rita on millions of Americans, and our industry has been working around the clock with all levels of government and the private sector to restore operations and ensure that consumers have adequate fuel supplies.

As I will explain, our companies have made much progress in recovering from the hurricanes, but much remains to be done. While many refineries, pipelines, and other facilities are back in operation, or are about to be, some facilities remain damaged and out of service. Fuels are flowing to consumers nationwide, but not at the normal levels. Thus, our companies are facing a more difficult challenge in keeping up with demand for gasoline and other products. We are facing tight supplies, making it all the more important to heed the President's recent call for consumers to use energy wisely.

Energy conservation and efficiency in this time of tight supply are crucial – as important as our efforts to bolster supply. Companies are working 24/7 to get fuels to where they are needed in the quantities they are needed. And they are supplementing domestic production with increased imports of gasoline to help alleviate tight supplies.

API has run full page ads in major metropolitan newspapers across the nation urging industry and consumers to use available supplies wisely. We have urged these steps:

- Plan trips carefully. Combine multiple trips into one to do your errands. Minimize stop-and-go driving by avoiding rush hours. Consider car pooling.
- Maintain your car. Under-inflated tires can rob up to one mile per gallon from fuel economy.
- Drive efficiently. Unnecessary speedups and slowdowns can decrease fuel economy by up to two miles per gallon. Accelerate slowly and avoid engine idling.
- Slow down. Typically the faster you drive, the more fuel you use.
- Use energy wisely at home. Turn down thermostats, seal window and door leaks, clean furnace filters and replace less-efficient furnaces and hot water heaters.

The Gulf Coast is the very heartland of our industry. And New Orleans has been a hub of our industry for many decades. We are not just responding to this disaster, we are living it.

Thousands of our employees and their families and friends are also suffering the hardships of living in New Orleans and throughout this devastated region they call home. Many are still without homes. In concert with fire and police officials, neighbors, suppliers, and government

authorities, our companies are restoring the production, bringing the refineries back online, and restarting the pipelines – while at the same time grieving over the loss of homes, neighborhoods, and even loved ones.

The Gulf Coast region includes some 4,000 offshore platforms in federal waters, dozens of refineries, and hundreds of production, transportation and marketing facilities. These federal waters account for nearly 30 percent of the nation's crude oil production and approximately 20 percent of the natural gas production. There is a reason for this geographic concentration. Government policies have largely limited offshore exploration and production to the Central and Western Gulf – and our onshore facilities, including refineries, have been welcomed in communities in the region. Unfortunately, offshore oil and natural gas development has been barred elsewhere – including the eastern portion of the Gulf and the entire Atlantic and Pacific Coasts. Onshore construction has been held back by government restrictions, permitting delays, and not-in-my-backyard (NIMBY) sentiments.

An area of much recent concern is the need to bring additional clean-burning natural gas to industries and consumers nationwide. Yet, efforts to increase domestic natural gas production, both in the Rocky Mountain West and offshore, have been stymied – and efforts to build more terminals outside the Gulf region to permit increased imports of liquefied natural gas (LNG) have also been largely blocked.

## **II. THE IMPACT OF HURRICANES KATRINA AND RITA ON THE U.S. OIL AND NATURAL GAS INDUSTRY**

I know that I speak for every one of our member companies when I say that our first concern – from the moment it becomes evident that a hurricane is approaching the Gulf – is for the well-being and safety of the thousands of men and women from across the country who work on offshore facilities, on the vessels that serve them, and in the refineries, distribution networks, and retail outlets around the Gulf coast.

Equally as important is the welfare and recovery of the communities in the Gulf region. Millions of people in the area are experiencing firsthand the physical and emotional hardship of the death and devastation caused by these two hurricanes, and our hearts and our prayers are with them.

API is working with the American Red Cross to facilitate U.S. oil and natural gas industry efforts to help people throughout the Gulf region. Our member companies are helping relief efforts through corporate contributions and by encouraging customer and employee contributions.

The companies are donating millions of dollars to humanitarian relief efforts to assist evacuees and help rebuild lives and communities. They are supporting national, state and local initiatives in recovery and relief through contributions of products, services, and technology. API and its members, in conjunction with the Gulf Coast Workforce Board and the U.S. Department of Labor, are working with employers in Texas and the surrounding states to help people displaced by the hurricanes to find new jobs.

We want to thank President Bush for making available more than 24 million barrels of crude oil from the Strategic Petroleum Reserve (SPR) to help offset supply shortfalls after Katrina and Rita -- truly a circumstance for which the SPR was intended -- and we appreciate the International Energy Agency (IEA) member nations' contributions of additional strategic reserves. We are also grateful that the Environmental Protection Agency (EPA) and the Department of Transportation, in conjunction with the involved states, have granted waivers to expedite the flow of fuels, particularly to emergency responders -- an action that is very helpful at a time when logistics and distribution of fuels are extremely difficult and critical.

In addition, the Department of Homeland Security's waivers of the Jones Act have helped to provide fuel supplies by enabling foreign as well as U.S. vessels to transport crude oil and refined petroleum products between domestic ports. And, through both hurricanes, the Department of Energy has played a central and invaluable role in leading and coordinating overall efforts by all levels of government to respond to the energy impacts of Katrina and Rita.

These and other positive steps by government are most helpful in dealing with this catastrophe. We also believe it is particularly important for government officials at the federal, state and local levels to urge citizens nationwide to use energy wisely, particularly in terms of not hoarding gasoline and not "topping off" their vehicle tanks. We welcomed the President's recent comments on the need to use fuel wisely and avoid unnecessary travel.

In attempting to meet the challenges we face, it is also most important to do no harm. The worst thing Congress could do in these challenging times would be to repeat the mistakes of some past

energy policies by overriding the structures of the free marketplace. Imposing new controls, allocation schemes, new taxes on industry, or other obstacles will only serve to make the situation much worse -- for the very individuals who are being relied upon to bring our energy systems back to full operating order.

#### Effects of Hurricanes Katrina and Rita on Industry Facilities

While our companies are still assessing the full effects of the hurricanes on production, refining, and pipeline facilities in the Gulf region, the storms clearly had a significant and widespread impact on our operations. Thanks to the around-the-clock work of company employees and contractors, facilities are coming back online and fuel is flowing from refineries through pipelines to consumers.

While I will attempt to provide you with the latest information we have, I would caution you that the situation can change markedly from day to day, from the standpoint of what we know and what actual progress has been made.

Our latest information from the Department of Energy (DOE), the Minerals Management Service (MMS), the Association of Oil Pipe Lines (AOPL), and member companies on the status of our industry and its facilities is as follows:

#### **OFFSHORE PRODUCTION**

##### **-- Summary of Impact of Hurricanes Katrina and Rita**

Recent hurricanes have reinforced the important role domestic energy supplies play in our economy. Shut-in oil and natural gas production from Hurricanes Ivan (2004) and Katrina and Rita this year, combined with growing demand for petroleum products and natural gas, have increased costs for all energy consumers. And, the tight supply/demand balance has made energy markets more volatile.

It had taken almost a year for the last of the offshore facilities to near recovery from Hurricane Ivan, when Katrina struck. Cumulative shut-in production from Ivan was 40 million barrels of oil and 160 billion cubic feet of natural gas. Ironically, API, along with the Minerals Management Service and Coast Guard, had just convened a workshop at the end of July to evaluate the experiences of Hurricane Ivan and examine whether new policies/practices should be considered.

Hurricane Katrina initially shut in virtually all oil production (about 1.5 million barrels per day) from the Gulf of Mexico (GOM) and 88 percent (about 8.8 billion cubic feet per day) of the Gulf's natural gas production. Just prior to Hurricane Rita's entry into the region, oil production had recovered with about 55.8 percent (837.6 MMB/D) still shut in and about 33.7 percent of GOM natural gas shut in (3.375 billion cubic feet per day).

The advent of Hurricane Rita forced offshore facilities to shut down again to protect employees. It has been estimated that about 75 percent of the offshore facilities in the Gulf were in the path of Hurricane Rita. Once again, as of 9/30/05, virtually all (97.8 percent) GOM oil production was offline (1.47 million barrels per day) and about 80 percent of the natural gas (7.9 billion

cubic feet per day). This situation has improved, albeit slowly. As of 10/14, shut-in oil production was equivalent to 67.26 percent (1.0 MMB/D) of daily Gulf production and 56.4 percent (about 5.64 billion cubic feet per day) of natural gas production. The cumulative production shut-in from both Katrina and Rita (8/26/05 – 10/14/05) is 57.64 million barrels of oil (about 10.5 percent of yearly GOM production) and about 283.3 billion cubic feet of natural gas, (about 7.91 percent of yearly GOM production).

Companies continue to diligently assess their platforms and subsea production and delivery systems to assess damage and ensure that it is safe for employees to work on offshore structures and for production to resume without any environmental impacts. Considering the magnitude of the hurricane and its path, damage to offshore platforms seems somewhat less than anticipated. However, while damage reports are still being collected, we do know that Chevron's Typhoon platform was severed from its moorings and suffered severe damage. According to news reports, Typhoon accounted for less than 3 percent of Chevron's net production in the Gulf of Mexico.

Recovery from Hurricane Rita in terms of offshore oil and gas production will be dependent on the other vital parts of the supply chain downstream of the production site. Subsea gathering pipelines and delivery systems must be operable. For natural gas, onshore processing plants must be up and running before that gas can be placed in pipelines for delivery to consumers. For crude oil, pipelines and terminals associated with shipping the oil must be working – not to mention the refineries that will transform the oil into products like gasoline, heating oil and jet fuel as well as the pipelines that will deliver those products to consumers. And, for all of these parts of the supply chain, electricity must be available to power operations.



It may seem self-evident, but it is worth remembering that every hurricane is unique and their impacts can differ substantially. Last year, Hurricane Ivan's impacts were most notable on the seafloor, as it triggered undersea mudslides. Hurricane Katrina seemed to have its greatest impacts onshore, although it did damage deepwater facilities serving the Mars, Ursa, Cognac and West Delta 143 fields. Shell has indicated that production from these fields may not be feasible the rest of this year. According to *Bloomberg News*, Mars produced 220 MB/D of oil and 220 million cubic feet per day of natural gas. Prior to Hurricane Rita, Shell had indicated that about 60 percent of total production would be restored to pre-Katrina level within the fourth quarter.

Katrina's impact was also notable in terms of damage to older facilities operating in shallower waters. These were mostly low-volume producing wells. Overall, Katrina destroyed about 45 producing structures and 20 structures incurred extensive damage. To put these figures in perspective, there are some 4,000 platforms in the Gulf of Mexico's federal waters.

While the industry is working around the clock to restore production, damage from Hurricane Rita continues to be assessed. And, damage to the drilling fleet and platforms may turn out to be somewhat greater than initially thought. Based on the latest data available, Rita destroyed 65 platforms and extensively damaged 32 others.

In all of the hurricanes, drilling rigs were impacted – often photographs of drifting rigs were the most visible impact in terms of news coverage. Putting this in perspective, during Ivan, 5 rigs went adrift; 6 during Katrina; and 13 during Rita. In terms of damage, Katrina destroyed 4

drilling rigs, while 9 incurred extensive damage. Based on preliminary reports, Rita destroyed 4 drilling rigs and significantly damaged 10 others.

### **Offshore Production Observations/Lessons Learned**

- It is important to remember that the offshore infrastructure (4,000 platforms and 33,000 miles of pipeline) is sturdy and has weathered three powerful storms in the last 13 months without widespread major damage or environmental pollution. The majority of structures damaged by these hurricanes were older, lower volume producing facilities in shallower waters.
- Not only is resumption of production dependent on the downstream oil and gas supply chain, all parts of our infrastructure depend on other critical links such as electrical power. We must continue to make recovery of all parts of this critical infrastructure a primary priority.
- Additional attention should be placed on securing and tracking drilling rigs. We will incorporate the lessons of Katrina and Rita in our ongoing work initiated to assess and learn from Ivan. We will continue to work cooperatively with government to find ways to improve performance. The Department of the Interior is convening a meeting in mid-November to review mooring systems performance and API will participate.
- Communication and coordination between government at all levels and industry is vital to recovery. Prompt actions by government to, where necessary, temporarily remove regulatory obstacles have proved essential.

As a nation, we also must confront our energy needs and take the necessary steps to enhance domestic production of oil and natural gas. We can no longer afford to place “off limits” vast areas of the Eastern Gulf of Mexico, off the Atlantic and Pacific coasts, and offshore Alaska. Similarly, we cannot afford to deny Americans consumers the benefits that will come from opening the Arctic National Wildlife Refuge and from improving and expediting approval processed for developing the substantial resources on federal, multi-use lands in the West.

For example, there are about 300 trillion cubic feet of natural gas and 50 billion barrels of oil (technically recoverable resources) on the federal Outer Continental Shelf (OCS) off the lower 48 states with additional resources on the Alaskan OCS of 122 TCF of natural gas and 25 billion barrels of oil. Thus, the total recoverable resources with today’s technology is equivalent to the oil resources of Canada and Mexico combined and nearly three times the natural gas resources of these two countries. Yet, these estimates may be conservative since these areas are largely unexplored. Generally, the more an area is explored, the more its resource estimates grow. For example, the U.S. Geological Survey (USGS) estimates of undiscovered oil resources in the Central and Western Gulf of Mexico increased from 6.32 billion barrels of oil in 1995 to 33.39 billion barrels in 2003 – an increase of more than 400 percent. And, USGS estimates of undiscovered natural gas resources in those same areas increased from 88.1 TCF to 180.2 TCF over the same time period – an increase of more than 100 percent.

#### -- Natural Gas

The natural gas situation deserves special attention due to its key role in so many sectors of our economy and especially given its importance in heating homes throughout the nation. More than

60 million homes rely on natural gas. On October 12, natural gas prices set a record at \$14.43 per MMBtu. Although they settled down to \$13.103 the next day, natural gas prices are almost double what they were this time last year. Natural gas prices have been more than \$12 for 19 consecutive days. And, winter has yet to arrive.

Consumers can expect higher heating bills even in a mild/normal winter, according to the Energy Information Administration (EIA). EIA's *Winter Outlook*, released on 10/12, forecasts that, on average, households heating primarily with natural gas can expect to spend nearly 50 percent more this winter. EIA also warned: "Should colder weather prevail, expenditures will be significantly higher."

Unlike petroleum products where increased imports can help enhance available supplies, the ability to do that for natural gas is limited. Hurricanes Katrina and Rita have not only shut in a significant portion of the nation's natural gas supplies, the hurricanes have damaged natural gas processing plants which must be restored.

Hurricane Katrina damaged 7 gas processing plants along the Gulf Coast with a combined capacity of more than 5 billion cubic feet per day. This is equivalent to 9 percent of total U.S. natural gas production. Major issues affecting repairs and start-up of these plants include: access to facilities (standing water remains; some roads are not open); access to materials needed for repairs; and manpower issues.

Facilities in and near Houston do not appear to have sustained much damage. The Mont Belvieu area (about 25 miles east of Houston) is in the process of restarting. Natural gas liquid import/export facilities around the Houston Ship Channel have returned to service. Overall, Texas natural gas processing plants seem to have incurred little damage although some remain closed due to lack of electricity.

The area most impacted from a gas processing standpoint is Louisiana. A number of these plants were just recovering from damage due to Hurricane Katrina when Rita approached. Even those that did not sustain additional damage have been affected by the mandatory evacuations and other issues (e.g, access to Cameron Parish) related to Hurricane Rita. Repairs have resumed as conditions allow workers to return. In Alabama and Mississippi, plants in Mobile Bay and Pascagoula have been at heavily reduced recovery levels since the Tri-States pipeline has been out of service since Hurricane Katrina. This line crosses Lake Pontchartrain and many problems have been encountered in trying to return this line to service.

## **REFINERIES**

### **-- Summary of Impact of Hurricanes Katrina and Rita**

Based on the latest assessments (as of 10/12), 20 percent of U.S. refining capacity remains off-line or is restarting in the aftermath of Hurricanes Katrina and Rita. This divides between 15 percent from Rita and 5 percent from Katrina. Refineries in the Beaumont/Port Arthur area are still down, as is one in the Houston area. Others are back in normal operation or restarting. All refineries affected by the hurricanes now have partial or full power. The following is the latest information we have on the Texas/Louisiana refineries:

**Houston area**

<b>Normal operations</b>	<b>Capacity</b>	
Marathon/Texas City	72,000	
Valero/Houston	83,000	
Astra/Pasadena	100,000	
ConocoPhillips/Sweeney	229,000	
ExxonMobil/Baytown	557,000	
Valero/Texas City	209,950	Total normal operations: 1,250,950
<b>Reduced runs</b>		
Shell/Deer Park	200,000 (normal: 333,700)	
<b>Restarting</b>		
Lyondell-Citgo/Houston	270,200	
<b>Shut down</b>		
BP/Texas City	437,000	Total restarting or down: 707,200

**Beaumont / Port Arthur**

<b>Restarting</b>		
Valero	255,000	
<b>Shut down</b>		
Total Petrochemical	233,500	
Motiva	285,000	
ExxonMobil	348,500	Total restarting or down: 1,122,000

**Lake Charles**

<b>Normal operations</b>		
Calcasieu Refining	30,000	
<b>Restarting</b>		
Citgo	324,300	
ConocoPhillips	239,400	Total restarting or down: 563,700
<b>Others/normal ops</b>		
Valero, Ardmore, OK	83,161	
Valero, Krotz Springs, LA	80,000	

The four Katrina refineries, representing a little more than 5 percent of U.S. refining capacity, are: ConocoPhillips-Belle Chasse; ExxonMobil-Chalmette; Murphy Oil-Meraux; and Chevron-Pascagoula. Three are down; the fourth, Chevron-Pascagoula, is restarting.

**Refinery Observations/Lessons Learned**

- Refineries are complex. It takes more than a flip of a switch to get a refinery back up and running. In a normal situation, once the decision has been made that it is safe to start-up the refinery, it can take several days before the facility is back to full operating levels. This is because the process units and the associated equipment must be returned to operations in a staged manner to ensure a safe and successful start-up.
- Once a hurricane leaves the region, refinery managers assess what impact the hurricane had on their facilities. If any damage has occurred, repairs will need to be made before the refinery can be brought back online. Also, any flooding – a potentially significant problem – that has occurred will need to be dealt with before restarting the refinery.
- In the case of a start-up following a hurricane, other factors could cause further delay. These factors include the availability of crude oil, electricity to run the plant, and water used for cooling the process units. A refinery requires electricity to operate; if it is flooded, it cannot use electricity and cannot restart.
- Refineries have been prepared with hurricane preparedness and response plans for a very long time. Safety for neighboring communities and employees is a top priority. It takes a few days to shut down a refinery, and the better job done at shutdown, the more likely will be a smooth and safe startup.
- Most damage to refineries requires minor repairs, but it may take some time to completely assess and finish those repairs. Some refineries have been harder hit and are still awaiting power or repairing floor damage, and it will take more time to enable them to safely restart.

- Employees have shown incredible dedication, working on bringing the refineries back online. Some have lost their homes and are still focused on getting their refineries back up and running. Our member companies are proud of these efforts and are dedicated to finding employees temporary housing in cases where homes are lost.
- For example, ConocoPhillips' Alliance Refinery brought in two vessels to support operations. One sleeps 700. The company is operating the refinery like an offshore platform and sharing the vessel with some National Guardsmen to provide them shelter as well.
- Another example, is at Shell's Deer Park refinery, where the company gave one operator an emergency vehicle to join his distraught wife who had already evacuated the area. The company filled the vehicle with extra gasoline so he could help those whom he passed who had run out of gasoline.
- At ExxonMobil's Baton Rouge refinery, managers relied on creativity and improvisation to keep the facility functioning during and after Katrina. For example, loss of electric power shut off imports, particularly those coming through the Louisiana Offshore Oil Port (LOOP), which are vital to the refinery. As a stopgap, company officials located a foreign tanker full of oil that had ridden out the storm south of Baton Rouge and brought it to the refinery -- after quickly obtaining a waiver from the Jones Act that prohibits a foreign-flagged vessel from traveling between two U.S. ports. The company also created a ferry system using company barges to bring Strategic Petroleum Reserve (SPR) oil across the river from a Port Allen, Louisiana, refinery, which was the nearest location to which a pipeline could bring the SPR oil.



## **PIPELINES**

### **-- Summary of Impact of Hurricanes Katrina and Rita**

Despite the severe conditions caused by Hurricanes Katrina and Rita, most pipelines recovered rapidly, with only limited damage done to the pipeline system – indicating that this is a robust, durable system capable of withstanding considerable stress. After Hurricane Katrina, the industry worked around the clock to restore full operations at all major crude oil and petroleum product pipelines. However, Hurricane Rita impacted many of these pipelines again, and several key pipelines once more were closed or operated at partial capacity. As of Friday, October 14, 2005, all on-shore interstate oil pipelines had resumed 100 percent normal operating capacity. However, some systems continue to experience reduced availability of products to transport.

### **-- Pipeline Observations/Lessons Learned**

- Electricity. Commercial power availability is essential to pipeline operation. The ability of emergency response officials at the federal, state and local levels to facilitate, coordinate and prioritize the response of electric power utilities is essential. In-place backup generation equipment would be just as vulnerable as the local utility to major storm or attack, costly and difficult to accommodate in pipeline facilities.
- Communications. The lack of reliable telecommunications was a major issue in slowing response to the storms. In many cases land lines were out and cell coverage was spotty at best. Even when land lines were available, A/C-powered phones were useless. Satellite communication worked well, but the number of units available was limited and proper setup took some time. Loss of computing services removed email as a viable communications tool, except in some instances where personal data assistants

(Blackberries, etc.) allowed personnel to keep in touch. More clearly delineated contact points within the federal government made Rita response easier than Katrina response – there were fewer duplicate requests for updates and better use of designated contacts. This also made it easier to get federal help when needed as we had much improved channels into the government.

- Physical Security. Personnel and critical infrastructure assets must be protected -- generators and fuel supplies (to name only two) become valuable in a natural disaster.
- Aerial Reconnaissance. Many operators had difficulty getting clearance to conduct flyovers of their facilities to assess damage and stage repairs. It would be helpful if FAA could determine priorities and inform companies of what they are.
- Federal Fuel Waivers. The use of fuel quality waivers to allow the allocation of available fuels was helpful.
- Operations. A backup control center in a different building in the same city may be suitable in the event of terrorist attack (especially with backup generation capability), but not when dealing with a major area-wide event like a hurricane. The New Orleans pipelines that had a backup control center outside of the area and Houston pipelines with the same did not experience the same upset / contingency planning problems as did pipelines that had their backup centers in the same city.

## -- Government-related Issues

In the aftermath of Hurricanes Katrina and Rita, consideration should be given to:

- Improve telecommunications and electric power contingency operations for crude and petroleum product lines and establish protocols for continued service and prioritized restoration of service in emergencies.
- Governments should be prepared to provide security around critical infrastructure and military or police escorts for response personnel, critical equipment transport, and fuel delivery.
- Short-term relaxation of federal, state and local regulatory and permit requirements in the event of natural disasters to expedite recovery of pipeline service.
- Permit streamlining with DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) as the lead coordinating agency for oil pipelines, would be helpful in speeding repairs and making capacity expansion projects more attractive.
- Support for pipeline industry recommendations on FERC oil pipeline rates.
- Designation of National Energy Corridors for rights-of-way would encourage increased pipeline and electrical capacity.
- FAA should determine priorities and request procedures for flyovers to aid in assessment and repair of critical infrastructure and better communicate those priorities.
- Expedite and streamline deployment of housing for emergency responders.
- Develop an integrated refueling strategy for emergency responders (FEMA, National Guard, state and local authorities) and stranded motorists to minimize conflicting priorities, prioritize short-term emergency (re)supply focus, and ensure emergency responder refueling equipment is compatible with industry safety standards.

- Deployment of government-owned power generation and pump units.

## **MARINE TRANSPORTATION**

### **-- Impact of Hurricanes Katrina and Rita**

The Houston Ship Channel and Texas City Channel have reopened for 24-hour navigation.

The Gulf Intercoastal Waterway is fully open as a result of the operational agreements reached with the Corps of Engineers. The flooding in the Texas/Louisiana border area temporarily shut down the Calcasieu Locks in Calcasieu Parish, Louisiana, and the Leland Bowman Locks in Vermillion Parish. The Gulf Intercoastal Waterway is a critically important artery for both the oil and chemical industries. API worked with various government entities to ensure top priority for returning these locks to normal operations.

### **-- Marine Transportation Observations/Lessons Learned**

In responding to the hurricanes, the industry has worked in close cooperation with the U.S. Coast Guard, the Department of Energy, and the Maritime Administration to address marine transportation concerns. It has built on strong relationships that already existed between the industry and government in this area.

### **-- Government-related Issues**

- It was helpful to the industry's efforts that the President directed Homeland Security Secretary Chertoff to waive the Jones Act to facilitate transportation of materials from the Gulf Coast in the aftermath of Hurricanes Katrina and Rita. The Jones Act requires that

all vessels used to transport cargo and passengers between U.S. ports be owned by U.S. citizens, built in U.S. shipyards, and manned by U.S. citizen crews. The original Hurricane Katrina waiver was through September 19; following Hurricane Rita, the waiver was extended until October 24 for both crude oil and products.

- It was also helpful that the Coast Guard gave port captains permission to waive requirements related to Oil Spill Response Operator requirements in the Gulf. Shippers were faced with possibly being out of compliance with their Vessel Response Plans because of the widespread commitment of response equipment for hurricane clean-up operations.

## **INDUSTRY SECURITY/EMERGENCY RESPONSE**

### **-- Impact of Hurricanes Katrina and Rita**

Providing security in the aftermath of a hurricane is particularly important and difficult. In the aftermath of Katrina and Rita, the ranks of local law enforcement were significantly depleted as officers elected to look after their families, which in many instances meant leaving the area.

There are, of course, a great number of other interests competing with the need to protect critical infrastructure. Nevertheless, refineries and other similar infrastructure are at an elevated risk during a hurricane emergency and require protection by local law enforcement, state police, National Guard, or other entities that can fill the void.

In the aftermath of a hurricane, companies' priorities are to gain access to the facility to conduct an assessment of the damage, provide security and control access to the site, facilitate any

immediate safety and/or environmental remediation, undertake cleanup, make repairs of critical operating elements, and initiate restart of the facility.

The first requirement is to conduct an assessment of the site. This necessitates access by personnel to the site. In some instances, public sector personnel attempt to restrict access based upon the need to maintain law and order. In the aftermath of Katrina and Rita, roadblocks and other impediments were established to ensure that only first responders were provided access. However, it did pose some challenges for companies attempting to transport necessary supplies via ground transport. Generally, these challenges involved coordinating with law enforcement officials to obtain permits authorizing access into affected areas.

One concern was that emergency electrical generators, gas, food, and other necessities that companies were attempting to deliver to their locations would be seized by local agencies. Companies made special arrangements for materials to be carried in convoys comprising several vehicles and escorted by local law enforcement

**-- Industry Security/Emergency Response Lessons Learned**

- Housing for rescue, response and facility and infrastructure repair personnel in the storm-affected areas can be a major bottleneck to beginning recovery operations.
- Development of a formal communications channel into governmental response organizations/departments would be helpful.
- Development of an established process to expedite access to those areas shut down after a major disaster to begin rebuilding of critical industries is needed.

**Additional Industry Security/Emergency Response Observations**

- Companies report that the U.S. Coast Guard did an outstanding job in every area and on every level in responding to Hurricanes Katrina and Rita. Considering its diverse and demanding portfolio, which includes search and rescue, safety and security of ports and waterways, vessel inspections and response plans, the Coast Guard continues to provide the necessary leadership for a comprehensive and effective response.
- Companies provided their own officers for their facilities' protection in the affected areas and in support of their relief efforts; local law enforcement priority was public health and safety.
- Companies provided humanitarian response for their employees and contractors in the high impact areas due to lack of other support and response. Support was also provided to some police and other emergency responders from company distribution sites.
- Companies have been operating toll-free phone numbers for employees since before Hurricane Rita. Employees are encouraged to call the toll-free number to update the company on their welfare and status.
- ConocoPhillips provided fuel to National Guard and local government (including police) in storm-affected areas. The company is working with local hotels in storm-affected areas, providing generator power to allow them to open up prior to the power grid being restored. The hotels are being used to lodge response and repair crews.

**-- Government-related Issues**

- In general, there is a need for more coordination and more timely issue of information about the situation on the ground.
- Companies need assurances that materials intended for production and delivery of gasoline, diesel, and other fuels necessary for operation of emergency generators and vehicles would not be diverted from their intended purpose.
- Difficulty was experienced in getting air restrictions lifted in a timely manner to fly over affected areas and operations to assess damage to our facilities, although government agencies were requesting information.

### **III. GASOLINE PRICES AND RELATED ISSUES**

#### **Impact of Hurricanes on Gasoline Prices**

We know that the effects of Hurricanes Katrina and Rita on our industry are having a nationwide impact. We understand how Americans throughout the country have faced increased prices for gasoline and other fuels. However, we believe the market is working, as prices have moderated in recent weeks and are now well under the post-Katrina highs. What follows is background on two key components of the price of gasoline: crude oil price and taxes.

Crude Oil Price. Before Hurricanes Katrina and Rita struck, the price of gasoline was rising primarily because U.S. refiners are paying more for crude oil, the principal cost component of a gallon of gasoline. In fact, the Federal Trade Commission noted this exact point in a report this July: “To understand U.S. gasoline prices over the past three decades, including why gasoline prices rose so high and sharply in 2004 and 2005, we must begin with crude oil. The world price of crude oil is the most important factor in the price of gasoline. Over the last 20 years, changes



in crude oil prices have explained 85 percent of the changes in the price of gasoline in the U.S.”

The crude oil price is set in the international oil marketplace by the forces of supply and demand for oil worldwide.

Tax Component. While more than half the cost of gasoline is for crude oil, every time a motorist pulls up at the pump, he or she pays 46 cents in federal and state taxes per gallon of gasoline. The remainder is the cost to refine and market the gasoline. The average price of a gallon of regular gasoline reached \$2.85 for the week ending October 10, according to the U.S. Energy Information Administration (EIA). When the price of a barrel of crude oil is \$63, as it averaged in early October, a refiner paid about \$1.50 per gallon for the crude oil in order to make petroleum products. As noted above, taxes average 46 cents per gallon nationwide. The remaining amount includes the cost of running refineries, transporting the finished gasoline to markets via pipelines and tank trucks, and operating retail outlets. The cost to refine, market and distribute gasoline has been trending downward for many years. The recent price spikes are a direct consequence of disruptions in crude oil and gasoline supplies. (Attached is a chart showing combined federal, state and local gasoline taxes for each state.)

Our industry has never experienced back-to-back events like Hurricanes Katrina and Rita and their brutal aftermath. The hurricanes hit an industry that was already stretched to its limit by an extraordinarily tight global supply and demand balance. As EIA notes in its October *Short-Term Energy Outlook*, “The impact of the hurricanes on oil and natural gas production, oil refining, natural gas processing, and pipeline systems has further strained already-tight natural gas and petroleum product markets on the eve of the 2005-2006 winter heating season.” EIA anticipates

crude oil prices to average about \$64.50 per barrel through the end of 2006. The damage wrought by Katrina and Rita has clearly exacerbated the very market conditions that have led to today's higher prices.

Oil and gasoline prices jumped immediately after Katrina due to the widespread damage to energy infrastructure, but have moderated slightly as the industry restores operations. Oil prices rose to nearly \$70 per barrel, but have moderated somewhat to around \$65 per barrel. Similarly, the average price for gasoline nationwide jumped 46 cents per gallon in the week after Katrina hit, rising from \$2.65 to \$3.11 per gallon. However, as companies restarted some affected refineries and pipelines and the damage from Rita appeared less severe than expected, gasoline prices moderated. As of October 10, nationwide gasoline prices (for all grades) averaged \$2.90 per gallon, down 8 cents per gallon from the prior week.

EIA now forecasts that typical per-household expenditures for home heating oil will be significantly higher this winter when compared with last year: \$350 (48 percent) more for natural gas users; \$378 (32 percent) more for heating oil users; and \$325 (30 percent) more for propane users. To help the most economically vulnerable cope with higher bills during this time of crisis, we urge Congress to fully fund the Low-Income Home Energy Assistance Program (LIHEAP).

#### Zero Tolerance for Price Gouging

In the aftermath of Hurricanes Katrina and Rita and their effects on gasoline prices, some accused the oil and natural gas industry of price gouging. Let me be clear and direct: the

American Petroleum Institute and its member companies condemn price gouging. There is zero tolerance for those who break the law.

History provides an important guide here. Our industry has been repeatedly investigated over many decades by the Federal Trade Commission, other federal agencies, and state attorneys-general. None has ever found evidence that our companies have engaged in any anti-competitive behavior to drive up fuel prices.

The gasoline marketing system has the complexity and flexibility required to meet the varying needs of both companies and consumers. Companies have three basic types of outlet options and may employ any and all in their marketing strategies to maximize efficiencies and compete in the marketplace. First, they can own and operate the retail outlets themselves (company owned and operated outlets). The second option is to franchise the outlet to an independent dealer and directly supply it with gasoline. This option may have three different forms of property ownership: The operator can lease from the refiner, lease from a third party, or own the outlet outright. The third option is to utilize a “jobber,” who gains the right to franchise the brand in a particular area. Jobbers can choose to operate some of their outlets with their own employees and franchise other outlets to dealers. The mix of distribution methods varies widely across firms. Different refiners, depending on which type is perceived as most efficient, use different types of outlets.

Retailers are typically categorized as branded and unbranded sellers of fuel. Those who are retailers of unbranded gasoline generally pay lower wholesale prices for gasoline and they attract

customers with generally lower retail prices. These retailers price gasoline at retail based on an unbranded “rack” price. They typically shop around in the marketplace, without any binding long-term contracts, in order to obtain the best price. Understanding up-front that there is a certain degree of supply and price risk associated with this method of petroleum retailing, gasoline purchased by an unbranded retailer and priced off an unbranded rack price thus entails no long-term relationship or security of supply between buyer and seller. Most importantly, unbranded purchases do not typically allow the purchaser the use of the supplier’s brand name.

In contrast, a branded retailer is obligated by a contract to buy branded gasoline and pay a “dealer tank wagon” (DTW) price, which is generally higher than the rack price. Branded product is typically priced somewhat higher because it offers the dealer greater security of supply and the right to use the supplier’s brand name. This makes sense when one considers the investment in the brand name and the importance to both the supplier and retailer of assuring reliable and uninterrupted supply to customers.

In periods of market tightness, however, when a supplier may not have enough product to supply all branded dealers plus the unaffiliated, unbranded buyers, the unbranded retailers, without supply contracts, may pay higher wholesale prices than name-brand retailers. This typically occurs when there is a supply disruption caused by a pipeline or refinery breakdown – such as was caused by the two recent hurricanes.

#### Gasoline Prices and the World Oil Market

As noted above, prices are rising because of the forces of supply and demand in the global crude oil market. Supply and demand is in a razor-thin balance in the global market. Small changes in this market have a big impact.

World oil demand reached unprecedented levels in 2004 and continues to grow. Strong economic growth, particularly in China and the United States, has fueled a surge in oil demand. The U.S. Energy Information Administration (EIA) reports that global oil demand in 2004 grew by 3.2 percent – the strongest growth since 1978 – and projects growth to average 1.8 percent this year and next. By comparison, world demand between 1993 and 2003 grew at an average rate of 1.6 percent.

At the same time, world oil spare production capacity -- crude that can be brought online quickly during a supply emergency or during surges in demand -- is at its lowest level in 30 years. Current spare capacity is equal to only about 1 percent of world demand. Thus, the world's oil production has lagged, forcing suppliers to struggle to keep up with the strong growth in demand.

The delicate supply/demand balance in the global crude oil market makes this market extremely sensitive to political and economic uncertainty, unusual weather conditions, and other factors. Over the past several years, we have seen how the market has reacted to such diverse developments as dollar depreciation, cold winters, the post-war insurgency in Iraq, hurricanes in the Gulf of Mexico, the Venezuelan oil workers' strike in 2002-2003, uncertainty in the Russian

oil patch, ongoing ethnic and civil strife in Nigeria's key oil producing region, and decisions by OPEC.

While consumer concern about high gasoline prices is very understandable, we must recognize that gasoline prices mirror crude oil prices. Crude oil costs make up more than 50 percent of the cost of gasoline. Retail gasoline prices and crude oil prices have historically tracked, rising and falling together. When supply is abundant and demand is low, we see the opposite of today's situation: in late 1998, crude oil was selling under \$11 per barrel – and gasoline was selling for less than \$1.00 a gallon.

We currently import more than 60 percent of the crude oil and petroleum products we consume. American refiners pay the world price for crude and distributors pay the world price for imported petroleum products. U.S. oil companies don't set crude oil prices. The world market does. Whether a barrel is produced in Texas or Saudi Arabia, it is sold on the world market, which is comprised of hundreds of thousands of buyers and sellers of crude oil from around the world.

### Earnings

There is considerable misunderstanding about the oil and natural gas industry's earnings and how they compare with other industries. The oil and natural gas industry is among the world's largest industries. Its revenues are large, but so are its costs of providing consumers with the energy they need. Included are the costs of finding and producing oil and natural gas and the costs of refining, distributing and marketing it.

The energy Americans consume today is brought to us by investments made years or even decades ago. Today's oil and natural gas industry earnings are invested in new technology, new production, and environmental and product quality improvements to meet tomorrow's energy needs. *Oil & Gas Journal* estimates that the industry's total U.S. spending this year will be \$85.7 billion, compared with \$80.7 billion in 2004 and \$75.5 billion in 2003. It also estimates that exploration and production spending in the U.S. will grow 6 percent this year and that total upstream oil and gas spending in the U.S. will reach nearly \$66 billion.

The industry's earnings are very much in line with other industries and often they are lower. This fact is not well understood, in part, because the reports typically focus on only half the story – the total earnings reported. Earnings reflect the size of an industry, but they're not necessarily a good reflection of financial performance. Earnings per dollar of sales (measured as net income divided by sales) provide a more relevant and accurate measure of a company's or an industry's health, and also provide a useful way of comparing financial performance between industries, large and small.

For the second quarter of 2005, the oil and natural gas industry earned 7.7 cents for every dollar of sales compared to an average of 7.9 cents for all U.S. industry.<sup>1</sup> Many industries earned better returns in the second quarter than the oil and natural gas industry. For example, banks realized earnings of 19.6 cents on the dollar. Pharmaceuticals reached 18.6 cents, software and services averaged 17 cents, consumer services earned 10.9 cents and insurance saw 10.7 cents for every dollar of sales. Last year, the oil and natural gas industry realized earnings of 7 percent compared

---

<sup>1</sup> Earnings equal profits divided by sales calculated from "Corporate Scorecard," *Business Week*, August 22/29, 2005; and from company financial reports for oil and natural gas figures.

to an average of 7.2 percent for all U.S. industry. Over the last five years, the oil and natural gas industry's earnings averaged 5.7 cents compared to an average for all U.S. industry of 5.5 cents for every dollar of sales.

Some are calling for reinstatement of a windfall profits tax as a response to the nation's energy challenges. However, our industry's earnings are hardly a "windfall." Strong earnings enable our industry to remain competitive globally, benefit millions of shareholders and enable the industry to invest in innovative technologies that improve our environment and increase energy production to provide for America's future energy needs. Levying new taxes would likely end up harming consumers. As *The Wall Street Journal* editorialized recently, ("China Does Carternomics," August 19), "A windfall profits tax only discourages increases in supply by disincentivizing further production."

According to the Congressional Research Service (CRS), the windfall profits tax drained \$79 billion in industry revenues during the 1980s that could have been used to invest in new oil and natural gas production. In fact, 1.6 billion fewer barrels of oil were produced domestically due to the windfall profits tax – barrels that instead had to be secured from foreign sources. CRS found that the tax reduced domestic oil production from between 3 and 6 percent, and increased oil imports from between 8 and 16 percent.

#### Gasoline Prices: What Can Be Done?

The solution to high gasoline prices is more supply of crude oil and gasoline and less demand, but there is no simple strategy to make that happen. The United States is at a critical turning



point in shaping its future energy policy. The Energy Policy Act of 2005, signed by the President in August, signals a first step in a much-needed effort to enhance energy security and ensure the reliable delivery of affordable energy to consumers. But much remains to be done.

The problems we face are very real: growing world demand for energy at a time when many oil-producing countries around the world are increasingly limiting or restricting our industry's access to new resources; a lack of national commitment to develop our abundant domestic energy resources and critical infrastructure; and scant attention to energy efficiency. These factors have resulted in a tight supply/demand balance for U.S. consumers, causing recurring price spikes, greater market volatility, and overall strain on the nation's energy production and delivery systems.

Energy demand continues to grow. The Energy Information Administration (EIA) forecast that by 2025, U.S. energy consumption will increase by 35 percent, with petroleum demand up by 39 percent and natural gas up by 34 percent. These demand increases occur despite expected energy efficiency improvements of 33 percent and renewable energy supply increases of 41 percent.

Additional EIA forecasts point out our basic problem: Domestic energy supplies are not keeping up with increased demand; and we are relying more and more heavily on imports to meet our energy needs. EIA projects that U.S. crude oil production will fall by 17 percent by 2025 (assuming no production from ANWR), while crude oil imports will increase by 67 percent, and net petroleum product imports increase by 90 percent. Given these trends, it comes as no surprise

that EIA forecasts that our nation's dependency on foreign sources of petroleum will rise from 59 percent today to 68 percent in 2025.

This increase, to the extent that it reflects import costs lower than domestic supply costs, would represent a gain from trade which should be encouraged. However, when we have resources that can be developed at prices competitive to imports, and we choose not to do so, we place a wasteful and unnecessary burden on our own consumers.

In fact, we do have an abundance of competitive domestic oil and gas resources in the U.S. According to the latest published estimates, there are more than 131 billion barrels of oil and more than 1000 TCF of natural gas remaining to be discovered in the U.S.

However, 78 percent of this oil and 62 percent of this gas are expected to be found beneath federal lands and coastal waters.

Federal restrictions on leasing put significant volumes of these resources off limits, while post-lease restrictions on operations effectively preclude development of both federal and non-federal resources. The most comprehensive study of the effects of such constraints was the 2003 National Petroleum Council study of natural gas, which included an analysis of federal constraints on U.S. gas supply in two key areas – the Outer Continental Shelf (OCS) and the Rockies. The study found that in key areas of greatest supply potential, federal policy precludes or seriously constrains development. For instance, of the 209 TCF of estimated undiscovered gas in the Rockies, 69 TCF is completely off limits, while another 56 TCF is seriously

constrained by federal policy. On the OCS, the entire Atlantic, Pacific, and most of the Eastern Gulf of Mexico are off limits to development. Furthermore, the study found that sustaining these constraints over the next 20 years would cost U.S. consumers more than \$300 billion in increased energy costs.

We are aware that opponents of oil and natural gas development still raise environmental concerns. However, we would point out that history provides overwhelming evidence that our industry can find and develop oil and natural gas resources safely and with full protection of the environment, both on land and offshore. For example, according to the U.S. Coast Guard, for the 1980-1999 period, 7.4 billion barrels of oil were produced in federal offshore waters, with less than 0.001 percent spilled. That's a 99.999 percent record for clean operations – a statistic few others can likely match or best, and far less than the volumes of natural seeps that occur on ocean and gulf floors. The industry's leak prevention performance in offshore production during Hurricanes Ivan, Katrina and Rita continues this remarkable environmental record.

Using advanced technology and sound operational practices, our industry has steadily reduced the environmental impact of oil and gas development, both onshore and offshore. The surface presence for exploration and development wells has shrunk significantly. For example, a drilling pad the size of the Capitol is all that is needed to access any oil reserves that might exist in the entire 68.2 square mile District of Columbia. Horizontal and directional drilling now enables our industry to drill multiple underground wells from a single pad, sometimes reaching sites as far away as 10 miles from the drilling pad.

Additionally, the U.S. oil and natural gas industry is among the most heavily regulated industries in our country. Every lease contains a standard stipulation to protect air, water, wildlife and historic and cultural resources, but leases may also include up to nearly 1,000 additional stipulations to further protect resources.

The recently enacted Energy Policy Act of 2005 takes a positive step by requiring an inventory of OCS oil and natural gas resources. It will not, by itself, result in new energy supplies.

We need to build on the energy legislation by encouraging the flow of more natural gas and oil to the marketplace. And, while we must focus on producing more energy here at home, we do not have the luxury of ignoring the global energy situation. In the world of energy, the U.S. operates in a global marketplace. What others do in that market matters greatly.

For the U.S. to secure energy for our economy, government policies must create a level playing field for U.S. companies to ensure international supply competitiveness. With the net effect of current U.S. policy serving to decrease U.S. oil and gas production and to increase our reliance on imports, this international competitiveness point is vital. In fact, it is a matter of national security.

We can no longer wait 12 years, as we just did, to address our nation's energy policy. The energy legislation is a foundation, but it must be built upon. More needs to be done and more quickly, particularly increasing access to offshore resources. We have the ingenuity, the technology, and

environmental protections. If enactment of the energy legislation means we have a commitment to continued action, then it will truly be a turning point in reshaping U.S. energy policy.

### Refineries

We cannot understand or deal with high gasoline prices if we do not consider the state of refineries in the United States. During the 1980s-90s, the oil industry earned relatively poor rates of return on their investments. This was especially true in the refining sector, which was hard hit with the need for new investment in technology and equipment to produce cleaner burning fuels to meet clean air standards set by the Clean Air Act of 1990. The Act had a major impact on the operation of refineries in the U.S. and the return on investment realized at the time.

From 1994 to 2003, the industry spent \$47.4 billion to bring refineries into compliance with environmental regulations. That included \$15.9 billion in capital costs and \$31.4 billion in operations and maintenance costs to comply with regulations covering air, water and waste rules. Moreover, by 2010, the U.S. refining industry will have invested upwards of \$20 billion to comply with new clean fuel regulations. This is in addition to the cost of compliance with many dozens of other environmental, health, safety and security regulations. All this investment severely reduces the funds available for discretionary capacity expansion projects.

Technological advancements have helped refineries produce more from existing facilities than they did in the past. Refineries are doing a better job of bringing product to market for less – and the consumer has benefited. Even though a new refinery has not been built from scratch in 30 years, existing refineries are continually being upgraded and reworked to improve efficiency.

Inefficient process units are replaced and new units are built to provide more fuel processing flexibility.

We can see this in the decline in the refiner/market margin (measured as the difference between the retail price of gasoline minus taxes and minus the refiner's composite crude oil price). Back in 1980, the cost to refine and market and distribute gasoline averaged about 95 cents per gallon (in inflation-adjusted terms). By 1990, it averaged more than 61 cents per gallon, and, by 2000, it was 52 cents per gallon, which is about where it has averaged over the last five years.

Multiplying these reductions by the 330 billion gallons of petroleum products consumed translates into billions of dollars of savings for consumers. We all benefit every day from these improvements and efficiency gains.

#### The Need to Remove Refinery Capacity Constraints

The record-high gasoline prices, while primarily caused by increased crude oil prices and exacerbated by Hurricanes Katrina and Rita, have underscored the fact that U.S. demand for petroleum products has been growing faster than – and even exceeds – domestic refining capacity. While refiners have increased the efficiency, utilization and capacity of existing refineries, these efforts have not enabled the U.S. refining industry to keep up with growing demand.

The fact is that -- faced with increasingly more challenging fuels regulations -- only major refineries have the resources needed to expand their capacity. Smaller refineries are increasingly

unable to afford to expand. Moreover, local opposition and not in my backyard (NIMBY) attitudes persist and prevent new refineries from being constructed.

The U.S. refining industry has been expanding at a rate of approximately 1 percent over the past decade – the equivalent of a mid-size refinery. In order to create the opportunity for increasing the growth of U.S. refinery capacity, government policies are needed to create a climate conducive to investments to expand domestic refining capacity.

In addition, many of the steps the federal government could take to help the refinery capacity situation are covered in the December 2004 National Petroleum Council (NPC) study, *Observations on Petroleum Product Supply – A Supplement to the NPC Reports “U.S. Petroleum Product Supply – Inventory Dynamics, 1998” and “U.S. Petroleum Refining – Assuring the Adequacy and Affordability of Cleaner Fuels, 2000.”* For example, that NPC study suggested that the federal government should take steps to streamline the permitting process to ensure the timely review of federal, state and local permits to expand capacity at existing refineries.

New source review (NSR) requirements need to be reformed to clarify what triggers these reviews. Some refineries may be able to increase capacity with relatively minor adjustments, but are unsure if the entire facility’s permit review would be triggered – a burdensome and time-consuming process.

In addition to the myriad of other issues deterring new refining capacity investments, there are financial constraints as well. Attracting capital for new refinery capacity has been difficult with

refining rates of return historically averaging well below the average for S&P Industrials. Over the 10-year 1994-2003 period, the return on investment for the refining and marketing sector was 6.2 percent or less than half as much as the 13.5 percent for S&P Industrials. In only one year between 1977 and 2003 did the average return of refiners exceed the average for the S&P Industrials.

It is important to remember that the oil and natural gas industry operates in a global marketplace. Many oil and gas companies are global companies, whose U.S. investment decisions compete not only with decisions as to how to allocate capital investments in the U.S. among various sectors of the industry, but also with competing demands and investment needs overseas. In a global marketplace, companies will make the best economic investment decisions in order to bring affordable petroleum products to consumers. Imports may be the more economical option than new U.S. refineries, but that is a decision to be left to the global marketplace. Government policies must encourage, not interfere with, the global marketplace.

### Conclusion

The U.S. oil and natural gas industry recognizes the catastrophic impact that Hurricanes Katrina and Rita have had on millions of Americans and our industry is working with government and others in the private sector to do all we can to alleviate their suffering.

If we all do our part – industry providing supplies and repairs as expeditiously as possible, government facilitating needed approvals, and consumers adjusting their driving habits to



consume less fuel – Americans can overcome this challenge as we have others in our nation's history.

